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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/753,134	12/29/2000	Gary L. Shanklin	659/766	1798

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EXAMINER

SALVATORE, LYNDIA

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 02/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/753,134

Applicant(s)

SHANKLIN, GARY L.

Examiner

Lynda M Salvatore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 10-20, 22 and 35-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10-20, 22 and 35-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Terminal Disclaimer

1. The terminal disclaimer filed on 11/04/04 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US 6,054,020 has been reviewed and is accepted. The terminal disclaimer has been recorded. Accordingly, the double patenting rejections set forth in sections 3 and 4 of the last Office Action are hereby withdrawn. However, an updated art search produced new prior art for which to base a rejection.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-3 5,6, 10-20,22 and 35-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothe et al., US 4,738,847 in view of Burghardt et al., US 2002/0001726 A1.

The patent issued to Rothe et al., discloses a multi-ply absorbent article comprising a virucidal composition confined to the inner layer of the product (Abstract). Preferably the absorbent article comprises three plies, wherein the inner or middle layer further comprises a virucidally effective amount of a virucidal composition (Column 1, lines 22-35). Rothe et al., teaches applying the virucidal composition to the inner ply layer to reduce any irritation that may result from having the virucidal composition present on the surface of the article (Column 2, lines 10-20). The plies may be made from webs of cellulosic creped wadding, however, non-woven webs synthetic polymeric fibers are also suitable (Column 2, lines 47-54). The three-ply absorbent article is suitable for

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use as facial tissues, bathroom tissues, paper towels or wipes (Column 1, lines 36-39).

Suitable virucidal compositions include acids having the formula $R\text{-COOH}$, wherein R is selected from the group of lower alkyl; substituted lower alkyl; carboxy lower alkyl or carboxy dihydroxy (Column 1, lines 40-60).

Rothe et al., fails to disclose applying an amine-modified polysiloxane to the outer surfaces of a three-ply tissue product (Abstract). However, the published patent application issued to Burghardt et al., teaches a facial tissue comprising the claimed amine-modified polysiloxane composition. The general formula of the amine-modified polysiloxane is that of the Applicant's structure shown in claim 1 (Section 0027) wherein, $R_1\text{-}R_9$ moieties can be C_1 or greater alkyl substituents. $R_2\text{-}R_5$ can be hydroxy or C_1 , or greater alkyl alcohol substituents. R_{10} can include any amine-related functional groups (Section 0027) To balance the hydrophobicity, Burghardt et al., teaches blending a modified polysiloxane having the Applicant's structure depicted in claim 1, with the amine-modified polysiloxane (Section 0030) wherein x and y are integers > than 0. The mole ratio of x to (x + y) can be from .005% to about 25%. $R_1\text{-}R_9$ moieties can be C_1 or greater alkyl substituents. $R_2\text{-}R_5$ can be hydroxy or C_1 , or greater alkyl alcohol substituents. R_{11} can include functional groups such as ether, polyether, ester, amine, imine, amide as well as alkyl and alkenyl analogues (Section 0030). For example R_{11} can be a polyether functional group of the generic form $R_{12}\text{-(R}_{13}\text{-O)}_a\text{-(R}_{14}\text{-O)}_b\text{-R}_{15}$; wherein R_{12} , R_{13} and R_{14} are alkyl chains of C_1 or greater, R_{15} can be hydrogen or $C_1\text{-}C_4$ alkyl group and "a" and "b" can be integers from 1-100 (Sections 0031 and 0032). Burghardt et al., teaches the amine-modified polysiloxane to the surfaces of the tissue product to impart softness (Section 0026).

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Therefore, motivated to impart softness to a virucidal multi-ply absorbent article it would have been obvious to having ordinary skill in the art at the time the invention was made to apply the amine-modified polysiloxane composition to the multi-ply virucidal absorbent article of Rothe et al., as taught by Burghardt et al.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rothe et al., US 4,738,847 in view of Burghardt et al., US 2002/0001726 A1 as applied to claim 2 above and further in view of Roe et al., US 5,635,191.

The combination of prior art of Rothe et al., and Burghardt et al., fail to teach a liquid-impermeable base ply, however, the patent issued to Roe et al., discloses a disposable diaper comprising a liquid pervious top sheet having a fluid polysiloxane emollient/ lotion applied to the surface thereof (Abstract). The diaper construction generally includes the polysiloxane containing top sheet, an absorbent core, and a liquid impervious back sheet (Column 4, lines 18-24). Roe et al., discloses that the absorbent capacity of the core may be tailored suit a variety personal care needs such as diapers, sanitary napkins and incontinence pads (Column 5, lines 1-5).

Therefore, motivated by the desire to produce a virucidal disposable absorbent article it would have been obvious to one having ordinary skill in the art to provide the multi-ply article of Rothe et al., in view of Burghardt et al., with a liquid-impermeable base ply as taught by Roe et al.

5. Claims 35-41 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothe et al., US 4,738,847 in view of Walter et al., US 4,950,545 or US 5,227,242.

The patent issued to Rothe et al., discloses a multi-ply absorbent article comprising a virucidal composition confined to the inner layer of the product (Abstract).

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Preferably the absorbent article comprises three plies, wherein the inner or middle layer further comprises a virucidally effective amount of a virucidal composition (Column 1, lines 22-35). Rothe et al., teaches applying the virucidal composition to the inner ply layer to reduce any irritation that may result from having the virucidal composition present on the surface of the article (Column 2, lines 10-20). The plies may be made from webs of cellulosic creped wadding, however, non-woven webs synthetic polymeric fibers are also suitable (Column 2, lines 47-54). The three-ply absorbent article is suitable for use as facial tissues, bathroom tissues, paper towels or wipes (Column 1, lines 36-39). Suitable virucidal compositions include acids having the formula $R-COOH$, wherein R is selected from the group of lower alkyl; substituted lower alkyl; carboxy lower alkyl or carboxy dihydroxy (Column 1, lines 40-60).

Rothe et al., fails to teach adding a at least one siloxane composition to at least one outer ply, however, the patent issued to Walter et al., teaches applying a silicone compound to facial tissues to improve softness (Abstract '545 and '242). Suitable silicone compositions include various ganommodified polysiloxanes and mixtures of cyclic and non-cyclic-modified dimethyl siloxane (Column 2, 5-23-'545 and '242). Walter et al., specifically teaches printing the silicone compound onto the outer surfaces of the tissue (Column 6, 30-40-'545 and '242).

Therefore, motivated by the desire to provide a anti-microbial tissue product with improved softness it would have been obvious to one having ordinary skill in the art at the time the invention was made to the print the outer surface of the multi-ply tissue product taught by Roth et al., with the silicone/siloxane compounds taught by Walter et al.

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6. Claims 35-41 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothe et al., US 4,738,847 in view of Krzysik et al., US 6,544,386 B1.

The patent issued to Rothe et al., discloses a multi-ply absorbent article comprising a virucidal composition confined to the inner layer of the product (Abstract). Preferably the absorbent article comprises three plies, wherein the inner or middle layer further comprises a virucidally effective amount of a virucidal composition (Column 1, lines 22-35). Rothe et al., teaches applying the virucidal composition to the inner ply layer to reduce any irritation that may result from having the virucidal composition present on the surface of the article (Column 2, lines 10-20). The plies may be made from webs of cellulosic creped wadding, however, non-woven webs synthetic polymeric fibers are also suitable (Column 2, lines 47-54). The three-ply absorbent article is suitable for use as facial tissues, bathroom tissues, paper towels or wipes (Column 1, lines 36-39). Suitable virucidal compositions include acids having the formula $R-COOH$, wherein R is selected from the group of lower alkyl; substituted lower alkyl; carboxy lower alkyl or carboxy dihydroxy (Column 1, lines 40-60).

Rothe et al., fails to teach adding a at least one siloxane composition to at least one outer ply, however, the patent issued to Krzysik et al., teaches treating a multi-ply tissue product with surface additive composition (Abstract). Said additive composition is added to provide lubricity to the tissue and/or to provide wellness benefits to the skin of the user (Column 3, 65-Column 4, 5). Suitable additive compositions include silicone compositions comprising various modified polysiloxanes and mixtures of cyclic and non-cyclic-modified dimethyl siloxane (Column 9, 10-25).

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Therefore, motivated by the desire to provide a anti-microbial tissue product which may provide the user with wellness skin benefits such as lubricity it would have been obvious to one having ordinary skill in the art at the time the invention was made to treat the outer surface of the multi-ply tissue product taught by Roth et al., with the silicone/siloxane compounds taught by Krzysik et al.

Conclusion


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M Salvatore whose telephone number is 571-272-1482. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1482. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 8, 2005

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